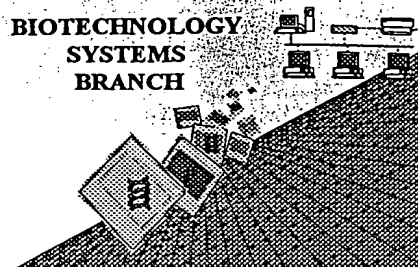


Hutson, Richard

RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
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The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number:

09/258,031

Art Unit / Team No. :

1052

Date Processed by STIC:

3/16/99

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**
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THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

MARK SPENCER 703-308-4212

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/258,031

DATE: 03/16/1999
TIME: 09:24:07

INPUT SET: S31054.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

RECEIVED
JUL 19 1999
IC 1600 MAIL ROOM
Does Not Copy
Corrected Diskette Needed

SEQUENCE LISTING

(1) General Information:

- (i) APPLICANT: *mod up - name must be on same line as leading*
- (A) NAME: MOGEN International nv
 - (B) STREET: Einsteinweg 97
 - (C) CITY: Leiden
 - (E) COUNTRY: The Netherlands
 - (F) POSTAL CODE (ZIP): 2333 CB
 - (G) TELEPHONE: 31-(0)71-5258282
 - (H) TELEFAX: 31-(0)71-5221471

(ii) TITLE OF INVENTION: Antifungal proteins, DNA coding therefor, and hosts incorporating same.

(iii) NUMBER OF SEQUENCES: 75

(iv) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)

(v) CORRESPONDENCE ADDRESS:

- (A) ADDRESSEE:
- (B) STREET:
- (C) CITY:
- (D) STATE:
- (E) COUNTRY:
- (F) ZIP:

(vii) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: EP 96.202.466.7
- (B) FILING DATE: 04-SEP-1996

(viii) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: EP 97.200.831.2
- (B) FILING DATE: 10-MAR-1997

insert the MANDATORY leading and its subleading for a U.S. case

ERRORED SEQUENCES FOLLOW:

696 (2) INFORMATION FOR SEQ ID NO: 19:

697

698 (1) SEQUENCE CHARACTERISTICS:

- 699 (A) LENGTH: 1590 base pairs
- 700 (B) TYPE: nucleic acid
- 701 (C) STRANDEDNESS: double
- 702 (D) TOPOLOGY: linear

1589 shown (p 4)

RAW SEQUENCE LISTING PATENT APPLICATION US/09/258,031

DATE: 03/16/1999
TIME: 09:24:08

INPUT SET: S31054.raw

```

703
704     (ii) MOLECULE TYPE: cDNA to mRNA
705
706     (iii) HYPOTHETICAL: NO
707
708     (iii) ANTI-SENSE: NO
709
710     (vi) ORIGINAL SOURCE:
711         (A) ORGANISM: Helianthus annuus
712         (B) STRAIN: Zebulon
713
714     (ix) FEATURE:
715         (A) NAME/KEY: CDS
716         (B) LOCATION: 1..1590
717
718
719     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
720
721     ATG GAG ACT TCC ATT CTT ACT CTC CTT CTT CTC TTG CTC TCA ACC CAA      48
722     Met Glu Thr Ser Ile Leu Thr Leu Leu Leu Leu Leu Leu Ser Thr Gln
723         1             5             10             15
724
725     TCT TCT GCA ACT TCC CGT TCC ATT ACA GAT CGC TTC ATT CAA TGT TTA      96
726     Ser Ser Ala Thr Ser Arg Ser Ile Thr Asp Arg Phe Ile Gln Cys Leu
727             20             25             30
728
729     CAC GAC CGG GCC GAC CCT TCA TTT CCG ATA ACC GGA GAG GTT TAC ACT     144
730     His Asp Arg Ala Asp Pro Ser Phe Pro Ile Thr Gly Glu Val Tyr Thr
731             35             40             45
732
733     CCC GGA AAC TCA TCT TTT CCT ACC GTC TTG CAA AAC TAC ATC CGA AAC     192
734     Pro Gly Asn Ser Ser Phe Pro Thr Val Leu Gln Asn Tyr Ile Arg Asn
735         50             55             60
736
737     CTT CGG TTC AAT GAA ACT ACC ACA CCA AAA CCC TTT TTA ATC ATC ACA     240
738     Leu Arg Phe Asn Glu Thr Thr Thr Pro Lys Pro Phe Leu Ile Ile Thr
739         65             70             75             80
740
741     GCC GAA CAT GTT TCC CAC ATT CAG GCA GCT GTG GTT TGT GGC AAA CAA     288
742     Ala Glu His Val Ser His Ile Gln Ala Ala Val Val Cys Gly Lys Gln
743             85             90             95
744
745     AAC CGG TTG CTA CTG AAA ACC AGA AGC GGT GGT CAT GAT TAT GAA GGT     336
746     Asn Arg Leu Leu Leu Lys Thr Arg Ser Gly Gly His Asp Tyr Glu Gly
747             100             105             110
748
749     CTT TCC TAC CTT ACA AAC ACA AAC CAA CCC TTC TTC ATT GTG GAC ATG     384
750     Leu Ser Tyr Leu Thr Asn Thr Asn Gln Pro Phe Phe Ile Val Asp Met
751             115             120             125
752
753     TTC AAT TTA AGG TCC ATA AAC GTA GAT ATC GAA CAA GAA ACC GCA TGG     432
754     Phe Asn Leu Arg Ser Ile Asn Val Asp Ile Glu Gln Glu Thr Ala Trp
755         130             135             140

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INPUT SET: S31054.raw

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757	GTC	CAA	GCC	GGT	GCG	ACT	CTT	GGT	GAA	GTG	TAC	TAT	CGA	ATA	GCG	GAG	480	
758	Val	Gln	Ala	Gly	Ala	Thr	Leu	Gly	Glu	Val	Tyr	Tyr	Arg	Ile	Ala	Glu		
759	145					150					155					160		
760																		
761	AAA	AGT	AAC	AAG	CAT	GGT	TTT	CCG	GCA	GGG	GTT	TGT	CCA	ACG	GTT	GGC	528	
762	Lys	Ser	Asn	Lys	His	Gly	Phe	Pro	Ala	Gly	Val	Cys	Pro	Thr	Val	Gly		
763					165					170					175			
764																		
765	GTT	GGT	GGG	CAT	TTT	AGT	GGT	GGT	GGG	TAT	GGT	AAT	TTG	ATG	AGA	AAA	576	
766	Val	Gly	Gly	His	Phe	Ser	Gly	Gly	Gly	Tyr	Gly	Asn	Leu	Met	Arg	Lys		
767				180					185					190				
768																		
769	TAT	GGT	TTG	TCG	GTT	GAT	AAT	ATT	GTT	GAT	GCT	CAA	ATA	ATA	GAT	GTG	624	
770	Tyr	Gly	Leu	Ser	Val	Asp	Asn	Ile	Val	Asp	Ala	Gln	Ile	Ile	Asp	Val		
771			195					200					205					
772																		
773	AAT	GGC	AAG	CTT	TTG	GAT	CGA	AAG	AGT	ATG	GGT	GAG	GAT	TTG	TTT	TGG	672	
774	Asn	Gly	Lys	Leu	Leu	Asp	Arg	Lys	Ser	Met	Gly	Glu	Asp	Leu	Phe	Trp		
775		210					215					220						
776																		
777	GCG	ATC	ACC	GGC	GGT	GGT	GGT	GTT	AGT	TTT	GGT	GTG	GTT	CTA	GCC	TAC	720	
778	Ala	Ile	Thr	Gly	Gly	Gly	Gly	Val	Ser	Phe	Gly	Val	Val	Leu	Ala	Tyr		
779	225					230					235					240		
780																		
781	AAA	ATC	AAA	CTA	GTT	CGT	GTT	CCG	GAG	GTT	GTG	ACC	GTG	TTT	ACC	ATT	768	
782	Lys	Ile	Lys	Leu	Val	Arg	Val	Pro	Glu	Val	Val	Thr	Val	Phe	Thr	Ile		
783					245					250					255			
784																		
785	GAA	AGA	AGA	GAG	GAA	CAA	AAC	CTC	AGC	ACC	ATC	GCG	GAA	CGA	TGG	GTA	816	
786	Glu	Arg	Arg	Glu	Glu	Gln	Asn	Leu	Ser	Thr	Ile	Ala	Glu	Arg	Trp	Val		
787				260					265					270				
788																		
789	CAA	GTT	GCT	GAT	AAG	CTA	GAT	AGA	GAT	CTT	TTC	CTT	CGA	ATG	ACC	TTT	864	
790	Gln	Val	Ala	Asp	Lys	Leu	Asp	Arg	Asp	Leu	Phe	Leu	Arg	Met	Thr	Phe		
791			275					280					285					
792																		
793	AGT	GTC	ATA	AAC	GAT	ACC	AAC	GGT	GGA	AAG	ACA	GTC	CGT	GCT	ATC	TTT	912	
794	Ser	Val	Ile	Asn	Asp	Thr	Asn	Gly	Gly	Lys	Thr	Val	Arg	Ala	Ile	Phe		
795		290					295					300</						

RAW SEQUENCE LISTING PATENT APPLICATION US/09/258,031

DATE: 03/16/1999
TIME: 09:24:08

INPUT SET: S31054.raw

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809 CCA ACC ACG GCG CTC TTA AGC CGT ACT CCT CAA AGA CTC AAC CCA TTC 1104
810 Pro Thr Thr Ala Leu Leu Ser Arg Thr Pro Gln Arg Leu Asn Pro Phe
811      355      360      365
812
813 AAG ATC AAA TCC GAT TAT GTG CAA AAT CCT ATT TCT AAA CGA CAG TTC 1152
814 Lys Ile Lys Ser Asp Tyr Val Gln Asn Pro Ile Ser Lys Arg Gln Phe
815      370      375      380
816
817 GAG TTC ATC TTC GAA AGG ATG AAA GAA CTT GAA AAC CAA ATG TTG GCG 1200
818 Glu Phe Ile Phe Glu Arg Met Lys Glu Leu Glu Asn Gln Met Leu Ala
819      385      390      395      400
820 TTC AAC CCA TAT GGT GGT AGA ATG AGT GAA ATA TCC GAA TTC GCA AAG 1248
821 Phe Asn Pro Tyr Gly Arg Met Ser Glu Ile Ser Glu Phe Ala Lys
822      405      410      415
823
824 CCT TTC CCA CAT AGA TCG GGT AAC ATA GCG AAG ATT CAA TAC GAA GTA 1296
825 Pro Phe Pro His Arg Ser Gly Asn Ile Ala Lys Ile Gln Tyr Glu Val
826      420      425      430
827
828 AAC TGG GAG GAT CTT AGC GAT GAA GCC GAA AAT CGT TAC TTG AAT TTC 1344
829 Asn Trp Glu Asp Leu Ser Asp Glu Ala Glu Asn Arg Tyr Leu Asn Phe
830      435      440      445
831
832 ACA AGG CTG ATG TAT GAT TAC ATG ACT CCA TTT GTG TCG AAA AAC CCT 1392
833 Thr Arg Leu Met Tyr Asp Tyr Met Thr Pro Phe Val Ser Lys Asn Pro
834      450      455      460
835
836 AGA GAA GCA TTT TTG AAC TAT AGG GAT TTG GAT ATT GGT ATC AAC AGC 1440
837 Arg Glu Ala Phe Leu Asn Tyr Arg Asp Leu Asp Ile Gly Ile Asn Ser
838      465      470      475      480
839
840 CAT GGC AGG AAT GCT TAT ACT GAA GGA ATG GTT TAT GGG CAC AAA TAT 1488
841 His Gly Arg Asn Ala Tyr Thr Glu Gly Met Val Tyr Gly His Lys Tyr
842      485      490      495
843
844 TTC AAA GAG ACA AAT TAC AAG AGG CTA GTA AGT GTG AAG ACT AAA GTT 1536
845 Phe Lys Glu Thr Asn Tyr Lys Arg Leu Val Ser Val Lys Thr Lys Val
846      500      505      510
847
848 GAT CCT GAC AAC TTC TTT AGG AAT GAG CAA AGC ATC CCA ACT TTG TCA 1584
849 Asp Pro Asp Asn Phe Phe Arg Asn Glu Gln Ser Ile Pro Thr Leu Ser
850      515      520      525
851
--> 852 TCT TG
853 Ser
854      530
855

```

1590

1589

3471 (2) INFORMATION FOR SEQ ID NO: 75:

3472

(i) SEQUENCE CHARACTERISTICS:

3473 (A) LENGTH: 509 amino acids

3474 (B) TYPE: amino acid

3475

RAW SEQUENCE LISTING PATENT APPLICATION US/09/258,031

DATE: 03/16/1999
TIME: 09:24:09

INPUT SET: S31054.raw

3476 (D) TOPOLOGY: linear
3477
3478 (ii) MOLECULE TYPE: protein
3479
3480 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 75:
3481
3482 Ser Ile Gln Asp Gln Phe Ile Asn Cys Val Lys Arg Asn Thr His Val
3483 1 5 10 15
3484
3485 Ser Phe Pro Leu Glu Lys Thr Leu Phe Thr Pro Ala Lys Asn Val Ser
3486 20 25 30
3487
3488 Leu Phe Asn Gln Val Leu Glu Ser Thr Ala Gln Asn Leu Gln Phe Leu
3489 35 40 45
3490
3491 Ala Lys Ser Met Pro Lys Pro Gly Phe Ile Phe Arg Pro Ile His Gln
3492 50 55 60
3493
3494 Ser Gln Val Gln Ala Ser Ile Ile Cys Ser Lys Lys Leu Gly Ile His
3495 65 70 75 80
3496
3497 Phe Arg Val Arg Ser Gly Gly His Asp Phe Glu Ala Leu Ser Tyr Val
3498 85 90 95
3499
3500 Ser Arg Ile Glu Lys Pro Phe Ile Leu Leu Asp Leu Ser Lys Leu Lys
3501 100 105 110
3502
3503 Gln Ile Asn Val Asp Ile Glu Ser Asn Ser Ala Trp Val Gln Pro Gly
3504 115 120 125
3505
3506 Ala Thr Leu Gly Glu Leu Tyr Tyr Arg Ile Ala Glu Lys Ser Lys Ile
3507 130 135 140
3508
3509 His Gly Phe Pro Ala Gly Leu Cys Thr Ser Val Gly Ile Gly Gly Tyr
3510 145 150 155 160
3511
3512 Met Thr Gly Gly Gly Tyr Gly Thr Leu Met Arg Lys Tyr Gly Leu Ala
3513 165 170 175
3514
3515 Gly Asp Asn Val Leu Asp Val Lys Met Val Asp Ala Asn Gly Lys Leu
3516 180 185 190
3517
3518 Leu Asp Arg Ala Ala Met Gly Glu Asp Leu Phe Trp Ala Ile Arg Gly
3519 195 200 205
3520
3521 Gly Gly Gly Ala Ser Phe Gly Ile Val Leu Ala Trp Lys Ile Lys Leu
3522 210 215 220
3523
3524 Val Pro Val Pro Lys Thr Val Thr Val Phe Thr Val Thr Lys Thr Leu
3525 225 230 235 240
3526
3527 Glu Gln Asp Ala Arg Leu Lys Thr Ile Ser Lys Trp Gln Gln Ile Ser
3528 245 250 255

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/258,031DATE: 03/16/1999
TIME: 09:24:09

INPUT SET: S31054.raw

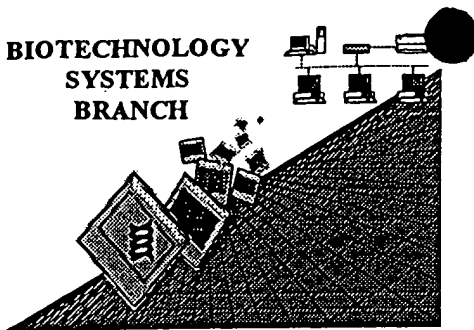
3529
3530 Ser Lys Ile Ile Glu Glu Ile His Ile Arg Val Val Leu Arg Ala Ala
3531 260 265 270
3532
3533 Gly Asn Asp Gly Asn Lys Thr Val Thr Met Thr Tyr Leu Gly Gln Phe
3534 275 280 285
3535
3536 Leu Gly Glu Lys Gly Thr Leu Leu Lys Val Met Glu Lys Ala Phe Pro
3537 290 295 300
3538
3539 Glu Leu Gly Leu Thr Gln Lys Asp Cys Thr Glu Met Ser Trp Ile Glu
3540 305 310 315 320
3541
3542 Ala Ala Leu Phe His Gly Gly Phe Pro Thr Gly Ser Pro Ile Glu Ile
3543 325 330 335
3544
3545 Leu Leu Gln Leu Lys Ser Pro Leu Gly Lys Asp Tyr Phe Lys Ala Thr
3546 340 345 350
3547
3548 Ser Asp Phe Val Lys Glu Pro Ile Pro Val Ile Gly Phe Lys Gly Ile
3549 355 360 365
3550
3551 Phe Lys Arg Leu Ile Glu Gly Asn Thr Thr Phe Leu Asn Trp Thr Pro
3552 370 375 380
3553
3554 Tyr Gly Gly Met Met Ser Lys Ile Pro Glu Ser Ala Ile Pro Phe Pro
3555 385 390 395 400
3556
3557 His Arg Asn Gly Thr Leu Phe Lys Ile Leu Tyr Tyr Ala Asn Trp Leu
3558 405 410 415
3559
3560 Glu Asn Asp Lys Thr Ser Ser Arg Lys Ile Asn Trp Ile Lys Glu Ile
3561 420 425 430
3562
3563 Tyr Asn Tyr Met Ala Pro Tyr Val Ser Ser Asn Pro Arg Gln Ala Tyr
3564 435 440 445
3565
3566 Val Asn Tyr Arg Asp Leu Asp Phe Gly Gln Asn Lys Asn Asn Ala Lys
3567 450 455 460
3568
3569 Val Asn Phe Ile Glu Ala Lys Ile Trp Gly Pro Lys Tyr Phe Lys Gly
3570 465 470 475 480
3571
3572 Asn Phe Asp Arg Leu Val Lys Ile Lys Thr Lys Val Asp Pro Glu Asn
3573 485 490 495
3574
3575 Phe Phe Arg His Glu Gln Ser Ile Pro Pro Met Pro Tyr
3576 500 505
3577
3578 6050 PCT
3579
3580
3581

--> *delete at end of file*

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/258,031DATE: 03/16/1999
TIME: 09:24:09**INPUT SET: S31054.raw**

Line	Error	Original Text
5	Mandatory Value Not Present	(i) APPLICANT:
6	Unknown or Misplaced Identifier	(A) NAME: MOGEN International nv
7	Unknown or Misplaced Identifier	(B) STREET: Einsteinweg 97
8	Unknown or Misplaced Identifier	(C) CITY: Leiden
9	Unknown or Misplaced Identifier	(E) COUNTRY: The Netherlands
10	Unknown or Misplaced Identifier	(F) POSTAL CODE (ZIP): 2333 CB
11	Unknown or Misplaced Identifier	(G) TELEPHONE: 31-(0)71-5258282
12	Unknown or Misplaced Identifier	(H) TELEFAX: 31-(0)71-5221471
699	Entered (1590) and Calc. Seq. Length (1589) differ	(A) LENGTH: 1590 base pairs
852	# of Sequences for line conflicts w/ running total	TCT TG
3578	Wrong Amino Acid Designator	6050 PCT

BIOTECHNOLOGY
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Notice of Availability of Checker Program

Applicant Aid for Biotechnology Computer Readable Form (CRF) Sequence Listing Submissions

The Patent and Trademark Office (PTO) has developed a computer program, called Checker, that will aid applicants in identifying and correcting errors prior to making submissions for compliance with the Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (Sequence Rules: 37CRF 1.821 through 1.825).

Final rules were published in the *Federal Register* (55 FR18230) on May 1, 1990, and in the PTO *Official Gazette* (1114 Off.Gaz.PatOffice 29) on May 15, 1990.

Checker is a DOS-based software program that is intended to assist users in determining whether errors may be present in the sequence listings, and is not intended to guarantee that the submission is error-free.

The most current version of the software is available via computer downloading, details are below. Copies on diskette are also available. Updated software versions will not be automatically mailed out; any updates will be announced in the PTO *Official Gazette*.

The software can be accessed/requested from the following locations:

- 1) Dial-up access through the Internet. Location is <ftp://ftp.uspto.gov>
The software is in current directory: `pub/checker/`
Download all the files. Cost: Free-of-charge
- 3) For diskette copies, mail to: U.S.P.T.O., OEIP, CRYSTAL PARK 3, SUITE 441
WASHINGTON DC 20231

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PTO Deposit Account

For Further Information, Contact: Arti Shah at 703-308-4212